What is claimed is:

1. A method of manufacturing a thin-film magnetic head having a magnetoresistive element, comprising the steps of:

forming a film for the magnetoresistive element, which is used for forming the magnetoresistive element, and a dummy film having a composition the same as that of the film for the magnetoresistive element and not used for forming the magnetoresistive element, into predetermined shapes respectively, on a base on which the magnetoresistive element is to be formed, within a region in which one thin-film magnetic head is to be formed;

in order to form the magnetoresistive element by etching a part of the film for the magnetoresistive element, etching a part of the film for the magnetoresistive element in its thickness direction in a specific region within the film, and a part of the dummy film in its thickness direction at the same time; and

controlling a position at which the etching is to be stopped, by performing, in the step of etching, a measurement for identifying elements scattered from the film for the magnetoresistive element and from the dummy film due to the etching, so as to perform the control based on results thereof.

2. A method according to claim 1, wherein each of the film for the magnetoresistive element and the dummy film includes a first magnetic layer, a tunnel barrier layer and a second magnetic layer that are stacked in this order on the base.

3. A method according to claim 2, wherein the position at which the

etching is to be stopped is a boundary between the second magnetic layer and the tunnel barrier layer.

4. A method according to claim 2, wherein the position at which the etching is to be stopped is a position located partway through the tunnel barrier layer in its thickness direction.

5. A method according to claim 2, wherein the position at which the etching is to be stopped is a boundary between the tunnel barrier layer and the first magnetic layer.

6. A method according to claim 2, wherein the position at which the etching is to be stopped is a position located partway through the first magnetic layer in its thickness direction.

7. A method according to claim 1, further comprising the step of forming a metallic layer that serves as the base on which the film for the magnetoresistive element and the dummy film are formed.

8. A method according to claim 7, wherein the metallic layer is formed of a non-magnetic metal.

9. A method according to claim 1, wherein the dummy film is formed at a position where it is hidden from an integrated surface by a patterned thin film formed after the dummy film has been formed.

10. A method according to claim 1, wherein the dummy film has a shape that represents a symbol for identifying each individual thin-film magnetic head.

11. A method according to claim 1, wherein a region in which the dummy film is formed has an area that falls within a range of 0.05 to 30 percent of the area of the region in which one thin-film magnetic head is to be formed.

12. A method according to claim 1, wherein a region in which the dummy film is formed has an area that falls within a range of 0.1 to 20 percent of the area of the region in which one thin-film magnetic head is to be formed.

13. A thin-film magnetic head having a magnetoresistive element and a dummy component that are formed on a base,

the magnetoresistive element being formed by etching a part of a film for the magnetoresistive element, the film having a specific shape and being used for forming the magnetoresistive element, in its thickness direction in a specific region within the film; and

the dummy component being formed by etching a part of a dummy film in its thickness direction, the dummy film having a composition the same as that of the film for the magnetoresistive element and not being used for forming the magnetoresistive element.

14. A thin-film magnetic head according to claim 13, wherein the

magnetoresistive element includes a first magnetic layer, a tunnel barrier layer and a second magnetic layer that are stacked in this order on the base.

15. A thin-film magnetic head according to claim 14, wherein one of surfaces of the dummy component farther from the base is located at a position corresponding to a boundary between the second magnetic layer and the tunnel barrier layer of the magnetoresistive element in a direction of thickness of the magnetoresistive element.

16. A thin-film magnetic head according to claim 14, wherein one of surfaces of the dummy component farther from the base is located at a position corresponding to a position located partway through the tunnel barrier layer of the magnetoresistive element in a direction of thickness of the magnetoresistive element.

17. A thin-film magnetic head according to claim 14, wherein one of surfaces of the dummy component farther from the base is located at a position corresponding to a boundary between the tunnel barrier layer and the first magnetic layer of the magnetoresistive element in a direction of thickness of the magnetoresistive element.

18. A thin-film magnetic head according to claim 14, wherein one of surfaces of the dummy component farther from the base is located at a position corresponding to a position located partway through the first magnetic layer of the magnetoresistive element in a direction of thickness of the magnetoresistive element.

19. A thin-film magnetic head according to claim 13, further having a metallic layer that serves as the base on which the magnetoresistive element and the dummy component are formed.

20. A thin-film magnetic head according to claim 19, wherein the metallic layer is formed of a non-magnetic metal.

21. A thin-film magnetic head according to claim 13, wherein the dummy component is formed at a position where it is hidden from an integrated surface by a patterned thin film formed after the dummy component has been formed.

22. A thin-film magnetic head according to claim 13, wherein the dummy component has a shape that represents a symbol for identifying each individual thin-film magnetic head.

23. A thin-film magnetic head according to claim 13, wherein a region in which the dummy component is provided has an area that falls within a range of 0.05 to 30 percent of the area of a surface of the thin-film magnetic head on which the magnetoresistive element and the dummy component are provided.

24. A thin-film magnetic head according to claim 13, wherein a region in which the dummy component is provided has an area that falls within a range of 0.1 to 20 percent of the area of a surface of the thin-film magnetic head on which the magnetoresistive element and the dummy component are

provided.

25. A method of forming a patterned thin film for a thin-film magnetic head, the thin-film magnetic head including a base body and a thin-film magnetic head element formed on the base body, the thin-film magnetic head element having the patterned thin film that is formed by etching a part of a film to be etched having a specific shape, in a direction of thickness of the film to be etched in a specific region within the film to be etched, the method including the steps of:

forming the film to be etched and a dummy film that has a composition the same as that of the film to be etched and is not used for forming the patterned thin film, into predetermined shapes respectively, on a base on which the patterned thin film is to be formed, within a region in which one thin-film magnetic head is to be formed;

in order to form the patterned thin film by etching a part of the film to be etched, etching a part of the film to be etched in its thickness direction in a specific region within the film, and a part of the dummy film in its thickness direction at the same time; and

controlling a position at which the etching is to be stopped, by performing, in the step of etching, a measurement for identifying elements scattered from the film to be etched and from the dummy film due to the etching, so as to perform the control based on results thereof.